



Work-Value Systems of White-Collar Workers

Author(s): J. M. Pennings

Source: *Administrative Science Quarterly*, Vol. 15, No. 4, (Dec., 1970), pp. 397-405

Published by: Johnson Graduate School of Management, Cornell University

Stable URL: <http://www.jstor.org/stable/2391330>

Accessed: 11/04/2008 07:17

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/action/showPublisher?publisherCode=cjohn>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit organization founded in 1995 to build trusted digital archives for scholarship. We enable the scholarly community to preserve their work and the materials they rely upon, and to build a common research platform that promotes the discovery and use of these resources. For more information about JSTOR, please contact support@jstor.org.

Work-Value Systems of White-Collar Workers

It is suggested that variations in work-value systems can be explained in terms of reference-group behavior. Herzberg's dual-factor theory of job satisfaction is challenged by relating value systems of white-collar workers to the promotion rates of their organization. The findings indicate that the importance attributed to intrinsic work aspects varies with promotion rates.

It has often been suggested that the different satisfactions offered by a job may be categorized as either intrinsic or extrinsic. Thus, Herzberg *et al.* (1959) made a distinction between work factors relating to the content of the job, and those relating to the situation in which a job is performed. They stated that job satisfaction consists of two continua: satisfaction/no satisfaction and dissatisfaction/no dissatisfaction. Following Maslow (1943), they consequently developed a model which indicated that the first set of factors, called satisfiers or intrinsic job aspects, contribute to a positive job attitude and to better performance, whereas the second cluster of factors, called dissatisfiers or extrinsic job aspects, are of a lower rank order and, when being fulfilled, only decrease the negative valence of job attitudes. Both Maslow (1943) and Herzberg *et al.* (1959) claimed that these theories have universal validity.

Job satisfaction models like this one have been sharply criticized for their methodological and theoretical weaknesses (Vroom, 1964; Whitsett and Winslow, 1967). If such a model were valid then every individual would have the same work-value system and Friedlander (1965) especially challenged the generality of such an absolute individual psychological motivation model. He attempted to relate work values to social parameters. He showed that work-value systems of employees were largely a function of their occupation and education. Similarly, Seeman (1967) and Turner and Lawrence (1965) indicated that differences in membership groups led to different work-value systems. In fact, Friedlander (1965) found that

even the distinction between blue-collar and white-collar workers was not sharp enough because, within the collectivity of white-collar workers, several subcollectivities were to be discerned. He did not, however, completely explain the differences found in value systems; for example, he did not deal with the extent to which differences in value systems may be contingent upon expectation patterns arising from simultaneous socialization processes.

Value systems are an important element in the individual's frame of reference. Work-value systems can be defined as constellations of attitudes and opinions with which an individual evaluates his job and work environment, and they may be either intrinsic or extrinsic. Usually value systems of white-collar workers are intrinsically oriented, whereas blue-collar workers attribute a greater importance to extrinsic values (Seeman, 1967; Turner and Lawrence, 1965; Friedlander, 1965).

This study attempts to ascertain to what degree structural factors might explain variance in the work-value systems of white-collar workers.¹ The influence of macrosocial factors such as stratification in the formation of several subcollectivities of white-collar workers is not considered here, although they too may explain some of the variance in work-value systems. The study tends toward an oversocialized concept of man, and it is assumed that the so-called human needs or

¹ Research was conducted while the author was a graduate student at the University of Leyden, the Netherlands. The author acknowledges the very helpful comments of Ed Cools, Ad W. M. Teulings, and David J. Hickson.

values are largely determined by social structures and cultural patterns. Many theorists have faced the problem of the relative usefulness and adequacy of either sociological or psychological models for the explanation of human needs and values. Sometimes psychologists tend more toward sociological approaches and sociologists toward psychological approaches (Friedlander, 1965; Etzioni, 1968). This study assumes, however, that basic human needs are susceptible to socialization processes, and hence it is agreed with Friedlander that structural factors may explain some of the differences in the work values of white-collar workers.

Merton's (1968) reference-group theory can be used for the explanation of differences in value systems. A reference group is a group or social collectivity the norms and values of which are accepted or rejected by an individual. The individual uses such a group as a frame of reference within which he evaluates his own behavior, attitudes and feelings. Reference groups may be membership and nonmembership groups. In his classic reanalysis of the findings of Stouffer *et al.* (1949), Merton (1968) demonstrated that the phenomenon of relative deprivation exemplified a certain case of reference-group behavior. Soldiers in units with favorable promotion possibilities evaluated their position mainly by comparing themselves with those of high rank, so that they were comparatively dissatisfied with their status and had negative attitudes toward their peers. Soldiers in battalions with low upward mobility rates used their peers' norms and values as an evaluation standard and showed less relative deprivation.

Merton (1968: 233) demonstrated that the amount of upward mobility as an institutionalized characteristic of a social system generates either a vertical or horizontal direction of comparison. In social systems with favorable advancement opportunities, individuals compare themselves with groups or collectivities of higher positions, whereas in systems with unfavorable advancement opportunities they compare themselves with peers. In the first case there is anticipatory socialization; in the second camaraderie. In his study of the Parisian clerical agency, Crozier (1955, 1965) concluded that there

were two kinds of white-collar workers, those who showed anticipatory socialization and played a promotion and social mobility game, which in day to day life was translated into a tendency to depreciate the present situation against a better future, and those who showed a degree of alienation and retreatism. It may therefore be hypothesized that the value orientations of white-collar workers will be strongly related to their degree of mobility as measured by institutionalized promotion rates.

Research in the Netherlands and the U.S. indicates that low-status, white-collar workers tend to have a work-value system rather similar to their fellow blue-collar workers (Friedlander, 1965; Seeman, 1967; Pennings, 1967; van Dijck, 1968). Blue-collar workers usually attribute great importance to extrinsic values like salary, fringe benefits, and relationships with co-workers and supervisors. Among high-status white-collar workers however, the work-value system is predominantly intrinsic. Friedlander (1965) in his lucid study described such a trend when he trichotomized a sample of white-collar workers. He showed that, although white-collar worker value systems were mainly intrinsic in nature, the degree to which they were intrinsic may vary. The importance attributed by white-collar workers to intrinsic aspects of their work varied positively with the worker's level in the hierarchy.

If white-collar workers are dichotomized into high and low then it may be hypothesized that high white-collar workers will have predominantly intrinsic value systems and low white-collar workers value systems that are intrinsic and extrinsic. Adding the reference group theory, it may further be hypothesized that white-collar workers at all levels in organizations with high promotion rates will refer to the intrinsically oriented job culture of the higher levels, whereas those with low promotion rates will refer to the job culture of their peers, which is both intrinsic and extrinsic. More precisely it may be predicted that in organizations with high promotion rates, low white-collar workers will have a more intrinsic work orientation whereas those in organizations with low promotion rates will tend to have a more extrinsic work-value system.

METHOD

Sample

This study, conducted in a large electronics manufacturing organization in the Netherlands, was part of a larger study which focused on the position of white-collar workers in relation to blue-collar workers and was carried out to provide guidelines for the future personnel policy of the company.

The field work was done in units of a strongly decentralized company. These units, such as large staff departments and subsidiaries, were largely independent and therefore viewed as distinct organizations. Twelve units of this company were selected in such a way as to include research and development, clerical, production, and marketing organizations so that a maximum variety of white-collar workers could be interviewed. The sample included the following units:

- A. Research laboratory for fundamental scientific research
- B. Development laboratory of a subsidiary, manufacturing telecommunication equipment
- C. Engineering department for more complex maintenance of several other plants
- D. Manufacturing plant for tools and equipment
- E. Subsidiary producing appliances
- F. Technical service department
- G. Subunit for internal transit
- H. Dispatch office
- I. Clerical department in charge of routine paperwork for headquarters
- J. Clerical accounting department
- K., L. Sales departments

Except for G, I, and J, the units were relatively large, exceeding 500 people. Random samples of 15 low white-collar workers were drawn in the three small units and 30 in larger ones, totaling 314 interviews. The response rate was very high, probably because in each unit the survey was supported by management. Since the interviewing was done in the summer, however, several reserve interviewees had to be interviewed.

It is important to note that in the Netherlands two distinct white-collar categories are to be discerned. Each one has several different characteristics so that it is almost

legitimate to consider them as two social collectivities. Dichotomizing Dutch white-collar workers into low and high therefore reflected to a large extent the actual labor conditions. Low white-collar workers belonged to the same formal level as blue-collar workers and shared unionization, salary level, and fringe benefits with them, though they did not do manual work. They included administrative clerks, salesmen, service operators, secretaries, foremen, technical assistants, shipping clerks, and programmers. High white-collar workers were more professional, had a rather individual job agreement, were not unionized, and had a much higher socioeconomic status. Their identity as two distinct collectivities is even more salient if one looks at their position in the organizations studied. There were two different terms to denote the two kinds of white-collar workers, and several secondary characteristics such as salary classification made the distinction clearer.

Although data were not available on the cultural elements of the two social collectivities, such as their work-value systems, it was assumed on the basis of the literature discussed that low white-collar workers tended to have a work-value system similar to that of blue-collar workers, whereas high white-collar workers had intrinsic work-value systems.

Collection of Data

The 12 units were differentiated according to their promotion rates. This independent variable was operationalized in two ways. First, four company personnel administrators were asked to rate the promotion opportunities for low white-collar workers in each of the 12 units. Secondly, in each unit the relative number of low and high white-collar workers was computed for five age categories. The underlying idea was that the number of low white-collar workers relative to the number of high white-collar workers in the younger age categories would indicate promotion rate; that is if the proportion of low white-collar workers in the total white-collar population was high but decreased in the older age categories, it was assumed that such a department did not inhibit promotion. Table 1 gives the scores for judgment and

TABLE 1. PROMOTION RATES FOR LOW WHITE-COLLAR WORKERS

Units	Estimates of promotion rates by 4 experts		Percent of low white-collar workers as a percentage of low and high white-collar workers		
	Mean	Rank	Young	Old	Rank
A	1.75	3.0	56	43	1
B	1.25	1.0	NA	NA	NA
C	2.50	6.5	NA	NA	NA
D	4.00	8.0	82	70	6
E	4.75	10.5	81	68	5
F	1.75	3.0	86	54	3
G	4.75	10.5	100	83	8
H	4.25	9.0	92	75	7
I	5.00	12.0	97	93	9
J	2.00	5.0	84	57	4
K	1.75	3.0	90	47	2
L	2.50	6.5	NA	NA	NA

composition indices for each unit. The correlation coefficient between the two sets of scores was .667 (Kendall's Tau B) showing a high degree of convergent validity. For each of the two indices it was possible to assign a rank to each unit of the sample. The sample could then be divided into two clusters of units; seven units showed a high promotion rate and five a low promotion rate.

It would be interesting to know whether the actual upward mobility coincides with the perceived upward mobility. Although reference-group theory usually excludes the awareness of promotion opportunities, there should be a high correlation between the two indicators (Deutsch and Krauss, 1965: 197). It might also be questioned whether the upward mobility outside the organization would intervene with the measures of promotion rates in the organization. Although no pertinent data are available, company analyses suggest that both turnover and inter-departmental mobility were relatively low.

The interview schedule used to obtain data included a section which was concerned with the relative importance of 14 work values derived from Herzberg *et al.* (1959) and Friedlander (1964), 8 reflecting intrinsic values, and 6 reflecting extrinsic values. These were presented in a random order with the following directions: "I have a set of cards here on which statements are written down. These statements refer to different

aspects of your job. Please would you arrange them according to how *important* they are *for yourself*."

It was hypothesized that low white-collar workers in units with high promotion rates would score high on the intrinsic items and ipso facto low on the extrinsic items, whereas low white-collar workers in units with low promotion rates would score low on intrinsic and high on extrinsic items. The first kind of units could be described as elevator units in which low white-collar workers behaved as if they already belonged to higher levels, whereas the groundfloor units contained employees who conformed to the existing low white-collar workers' culture.

RESULTS

The 14 items were ranked by the respondents in each unit. The item with the highest mean rank in a unit was given a score of 14 and that with the lowest mean rank a score of 1. These scores were then added together for the intrinsic and extrinsic items separately. This gave the intrinsic and extrinsic score for the unit. The scores for all the units are shown in Table 2. Since there were 8 intrinsic items, the intrinsic scores could vary theoretically from 36 to 84; the extrinsic

TABLE 2. INTRINSIC AND EXTRINSIC SCORES RELATED TO PROMOTION RATES

Units	Intrinsic work-values		Extrinsic work-values	
	Score	Rank	Score	Rank
<i>High promotion rate</i>				
A	68.7	12.0	36.1	1
B	66.9	10.0	38.0	4
C	62.9	3.5	42.1	10
F	62.9	3.5	41.6	8
J	65.9	9.0	38.7	3
K	68.9	11.0	36.3	2
L	65.5	7.0	39.3	5
<i>Low promotion rate</i>				
D	60.7	2.0	44.1	11
E	64.3	6.0	40.3	7
G	65.8	8.0	38.9	6
H	63.0	5.0	41.7	9
I	59.1	1.0	45.1	12

Mann-Whitney $U = 7$, $p < .05$.

scores from 21 to 69 because 6 items were used. Table 2 also gives the rank order of each unit on both extrinsic and intrinsic scores.

It would be expected that units with high promotion rates would score higher on the intrinsic dimension and lower on the extrinsic dimension, and the ranking of the departments indicates that this is partly true. The differences are so marked that one can conclude that low white-collar workers in units with high promotion rates had a predominantly intrinsic value system, whereas their colleagues in units with low promotion rates adhered more to extrinsic values.

The partial overlap is due to the fact that some items discriminate between the two kinds of units more than other items. Such indices may obscure differences, since some items may contribute more to differences between units than others. Therefore it is more useful to investigate both the differences in the configuration of values in the

two kinds of departments and which items were responsible for the differences in the scores in Table 2. Comparison of the scores of the two clusters of units on each item indicates that some items discriminate between the two clusters and as the *z*-values in the first two columns of Table 3 show, it is evident that some scores are more consistent with the expectations than are others. A negative sign indicates that the item has greater significance for units with low promotion rates.

Units with high promotion rates had higher scores on the intrinsic values and lower scores on extrinsic values; whereas extrinsic values were more important for employees in units with low promotion rates. It is very clear that the intrinsic values—abilities, interesting job, and advancement opportunities—and the extrinsic values—share in company's profit and equal footing—explain the differences in Table 3. The other five intrinsic items rather mitigate

TABLE 3. DIFFERENCES BETWEEN HIGH PROMOTION-RATE UNITS AND LOW PROMOTION-RATE UNITS FOR LOW WHITE-COLLAR WORKERS

Questionnaire items	Mean response for high promotion- rate units minus mean response for low promotion- rate units	Significance level	Mean rank	
			High promotion- rate units	Low promotion- rate units
<i>Intrinsic values</i>				
That I have a say in things which concern my job	.26	NS	7.50	7.24
That my job suits me	.46	NS	7.21	6.75
That I have work which is in accordance with my abilities	1.46	.001	10.49	9.03
That my supervisor is willing to listen to my suggestions	.60	NS	8.16	7.56
That I am responsible for what I do	.19	NS	9.60	9.41
That I have a job which is important for the company	-1.26	.01	6.23	7.49
That my job is interesting	.99	.05	9.21	8.22
That I have advancement opportunities	.79	.10	7.60	6.81
<i>Extrinsic values</i>				
That I get on well with my colleagues	- .10	NS	7.99	8.09
That I get good salary increases	- .26	NS	7.09	7.35
That I share in the company's profit	-1.14	.01	4.27	5.41
That I have a good pension and medical insurance	- .83	.10	5.30	6.13
That the work in my department is well supervised and organized	- .20	NS	8.59	8.79
That my supervisor puts all his men on the same footing	-1.04	.05	5.66	6.71

potential differences, and the same can be said of some of the extrinsic items. The items, get on well with colleagues and work well supervised and organized, considered by Herzberg (1966) as pure examples of dissatisfiers, hardly differentiate between the two kinds of units.

However, regardless of the fact that low white-collar workers in both kinds of units showed a mixture of intrinsic and extrinsic values, some intrinsic items were more crucial for employees in units with high promotion rates and some extrinsic ones were more relevant for employees in units with low promotion rates. The units with high promotion rates emphasize more individualistic values and those with low promotion rates tend to stress collectivistic values. One might also state that the low white-collar workers with upward mobility opportunities have an expressive orientation and that low white-collar workers who are not likely to be promoted tend to have an instrumental attitude toward their work.

Note however, that the score of the item, job important for company, is significantly in favor of the units with low promotion rates. This unexpected difference has affected the data in the nonhypothesized direction. It could be speculated that this item reflects a low amount of intrinsicness, but it did not correlate with the other intrinsic items nor with the extrinsic ones. The conclusion suggested itself that this item constituted a separate factor; if it is excluded, the data in Table 2 on the intrinsic dimension would indicate an overwhelming level of significance (Mann-Whitney $U = 0$; $p < .001$).

As always, the question arises, to what extent the relationships found are contaminated by other variables; for example, to what extent do income level or educational level interfere with promotion rates? It was found that although both variables did correlate with promotion rates, not all the intervening variables could be matched; but when these two factors were held constant, the pattern as described in Table 3 still remained. Also, with respect to age, the random samples in the various units included all ages. Although some age categories were slightly over-represented in some units, all age categories were represented in both kinds of units. Therefore the hypothesis is strongly sup-

ported. It might also be argued that macro-sociological factors intervene with the hypothesized relationship. Unit E, a subsidiary in a rural Calvinistic environment, had a rather intrinsic value orientation although promotion rates were low. However, Turner and Lawrence (1965) found that workers in a rural area and with a Protestant affiliation tended to have a more intrinsic work-value system, whereas Catholic workers expressed a negative attitude toward intrinsic job values. Furthermore, their extrinsic work culture was reinforced if they lived in an urban area. Because of lack of data, the questions of such ad hoc assumptions have to remain unanswered.

The work-value system of the low white-collar workers can be illustrated in a graph by plotting the intrinsic versus extrinsic scores of the units. Figure 1 shows the mean scores for the two dimensions for low white-collar workers, excluding the item job important to company. Figure 1 again demonstrates that a structural determinant like promotion rates indicates to a large extent variances in value systems.

The work-value, advancement opportunities, needs further clarification. Many authors considered this as one of the most important intrinsic work-values, and it is interesting to examine to what extent the existence of promotion rates in a unit determines the degree to which advancement opportunities in a work-value system is important. As Table 3 shows, the item advancement opportunities hardly discriminates between the two types of units, and the difference is not significant ($p < .10$). Closer investigation of the value system of each of the 12 units showed that advancement opportunities in units with high promotion rates as well as those with low promotion rates may be important. This might be explained by putting oneself in the respondents' frames of reference by looking at each department's correlation matrix of value item scores. The advancement-opportunities scores of white-collar workers in unit F correlates .35 with an extrinsic item like salary increase, .78 in unit J, and .73 in department A. Moreover, in these three departments salary increase correlates .15, .61, and .48 respectively with share in company's profit. Without arguing that these relation-

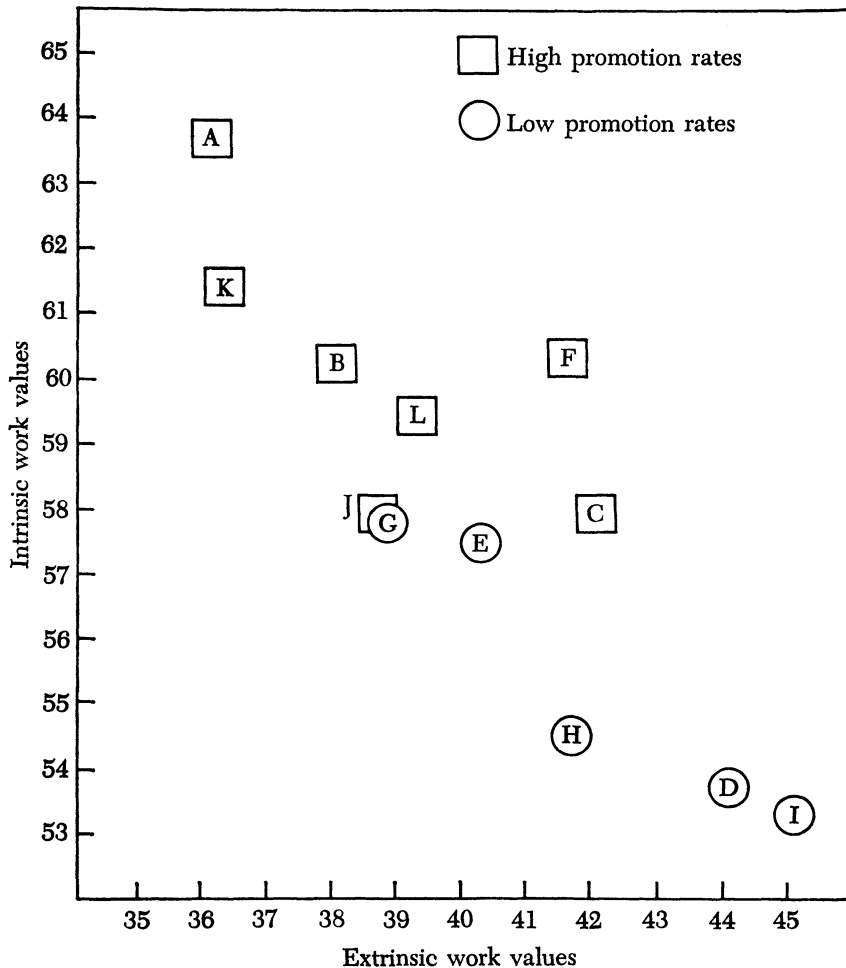


FIGURE 1. RELATION OF PROMOTION RATES TO EXTRINSIC AND INTRINSIC SCORES

ships have general validity, it seems that for some individuals, advancement opportunities may be a purely intrinsic value and for others both an intrinsic and extrinsic value, irrespective of whether advancement opportunities within their culture is important or not.

Not surprisingly, advancement opportunities as a criterion against which one evaluates one's own position is more important in organizational units with high promotion rates. Comparing the value hierarchies of the two kinds of units indicates that this item has a higher rank in units with high promotion rates, although the difference was not too significant. As Table 3 shows, the mean rank of this value in the value hierarchies of the two types of units is 7.60 versus 6.81 ($p < .10$), so that even for low white-collar work-

ers with lack of promotion opportunities, advancement opportunities is an important value in their value system.

DISCUSSION

The results presented provide little support for a two-factor theory of job satisfaction such as that of Herzberg *et al.* (1959). The data suggest that there are considerable and meaningful deviations from such a model when structural characteristics of the organization are taken into account. It is apparent that work-value systems are a function of the culture of an individual's unit at least as much as of his general psychological disposition and that we are allowed to conclude that, in spite of all the assumed cultural differences between the U.S. and the Nether-

lands, these results corroborate Friedlander's (1965) findings that within the collectivity of white-collar workers, systematic variations are to be found. Low white-collar workers who occupy social positions with promotion prospects show a value system that is more consistent with the role of the social position which they may some day attain. This is in accord with the suggestion that an individual's advancement opportunities foster changes in evaluations of situations and not the other way around (Lipset and Bendix, 1959). However, data on anticipatory socialization were not available and therefore had to be assumed in interpreting the results. Thus it was not possible to investigate how far anticipatory socialization has an adaptive or enhancing function for the behavior of some low white-collar workers with respect to their reference group and whether their anticipatory socialization or camaraderie goes together with phenomena like (dis)satisfaction with present position and negative or positive attitudes toward peers. On the other hand it was possible to relate value systems with structural qualities of an organization.

The main conclusion from this research focuses on the relationship between promotion rates and the work-value systems of low white-collar workers. For low white-collar workers the higher the promotion rates the higher the importance of aspects which may satisfy needs for self-actualization. The correlation coefficient between promotion rates and scores on intrinsic values was .696. Promotion rates do influence how white-collar workers evaluate their present position and determine their expectations with regard to their job and job environment.

The outlook of some white-collar workers is not too different from that of blue-collar workers and that of other white-collar workers may have a frame of reference which is quite similar to professionals or managers. Although the present approach is adequate for measuring an individual's subjective class position, this concept has not been dealt with. However, it is possible to state that the white-collar class lacks the homogeneity hypothesized by authors like Mills (1951), who saw white-collar workers as an extension of the suppressed, or Croner (1954), who saw them as an extension of management. The differen-

tiation in value systems raises questions about the validity of these positions.

Johannes M. Pennings is an instructor and doctoral student at the institute for social research at the University of Michigan.

REFERENCES

- Croner, F.
1954 *Die Angestellten in der Modernen Gesellschaft*. Frankfurt a.M., and Vienna: Humboldt Verlag.
- Crozier, M.
1955 "L'ambiguïté de la conscience de classe chez les employés et les petits fonctionnaires." *Cahiers Internationaux de Sociologie*, 21: 78-97.
1965 *Le Monde des Employés de Bureau*. Paris: Editions du Seuil.
- Deutsch, M., and R. M. Krauss
1965 *Theories in Social Psychology*. New York: Basic Books.
- Etzioni, A.
1968 "Basic human needs, alienation and authenticity." *American Sociological Review*, 33: 870-884.
- Friedlander, F.
1964 "Job characteristics as satisfiers and dissatisfiers." *Journal of Applied Psychology*, 48: 388-392.
1965 "Comparative work value systems." *Personnel Psychology* 18: 1-20.
- Herzberg, F.
1966 *Work and the Nature of Man*. Cleveland: World Publishing Company.
- Herzberg, F., B. Mausner, and B. Snyderman
1959 *The Motivation to Work*, 2nd ed. New York: Wiley.
- Lipset, S. M., and R. Bendix
1959 *Social Mobility in an Industrial Society*. Berkeley and Los Angeles: University of California Press.
- Maslow, A. H.
1943 "A theory of human motivation." *Psychological Review*, 50: 370-396.
- Merton, R. K.
1968 *Social Theory and Social Structure*. New York: The Free Press.
- Mills, C. Wright
1951 *White Collar*. New York: Oxford University Press.
- Pennings, J. V. H.
1967 *Beambten en Arbeiders binnen de Onderneming*. Sittard: Alberts' Drukkerijen.

- Seeman, M.
 1967 "On the personal consequences of alienation in work." *American Sociological Review*, 32: 274-289.
- Stouffer, S. A., E. A. Suchman, L. C. DeVinney, S. A. Star, and R. M. Williams
 1949 *The American Soldier*, Vol. 1, *Adjustment During Army Life*. Princeton: Princeton University Press.
- Turner, A. N., and P. R. Lawrence
 1965 *Industrial Job and the Worker*, An Investigation of Response to Task Attributes. Boston: Harvard University Press.
- van Dijk, J. J. J.
 1968 "Arbeidsmotieven en waardenorientaties in de arbeid." In J. Berting and L.U. de Sitter (eds.), *Arbeidsvoldoening en Arbeidsbeleid*: 35-55. Utrecht: Het Spectrum.
- Vroom, Victor
 1964 *Work and Motivation*. New York: Wiley.
- Whitsett, D. A., and E. K. Winslow
 1967 "An analysis of studies critical of the motivator-hygiene theory." *Personnel Psychology*, 20: 391-415.